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## (54) CATALYST FOR REDUCING NITROGEN OXIDE AND REDUCTION OF NITROGEN OXIDE

## (57) Abstract:

PURPOSE: To obtain a catalyst for reducing nitrogen oxides(NOx) in exhaust gas, and to provide a method for reducing NOx using this catalyst.

CONSTITUTION: In a catalyst for reducing NOx, Co is ion-exchanged and supported on BEA type zeolite in

which a part of Si is replaced with Ti and/or a part of Al is replaced with B to control a Co/Al ratio to be 0.2-0.6. A method for reducing NOx uses the catalyst. The catalyst has a high low-temperature activity under conditions of a low NOx concentration for an exhaust gas containing a hindering substance such as water vapor. When B is replaced in the catalyst, NOx can be reduced by methane in the presence of water vapor.

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